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In the Claims:

Amend the claims such that they read, as follows:

1. (currently amended) A heat sink comprising: a first thermal plate, a second thermal plate, and a plurality of adjacent fins integral with and extending between both the first thermal plate and the second thermal plate, the plurality of adjacent fins each having interfacing side surfaces, and a plurality of end spacers mounted between the plurality of adjacent fins to space and form fluid passages between the interfacing side surfaces thereof and the plurality of adjacent fins each extending continuously between the first thermal plate and the second thermal plate to establish laminar fluid flow through the fluid passages.

2. (original) The heat sink of claim 1 wherein first and second thermal plates are positioned at external sides of the heat sink.

3. (currently amended) The heat sink of claim 1 wherein the thermal plates are positioned at opposite ends of the heat sink with the plurality of adjacent fins extending substantially perpendicularly therebetween.

4. (currently amended) The heat sink of claim 1 further comprising an outer insulative coating applied to the outer surfaces of the heat sink to prevent heat from radiating outwardly from the heat sink except into passages between the plurality of adjacent fins.

5. (original) The heat sink of claim 1 further comprising a third thermal plate integral with the plurality of fins and positioned between the first thermal plate and the second thermal plate.

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6. (newly added) The heat sink of claim 1 wherein the plurality of adjacent fins are each substantially planar along their interfacing side surfaces.
7. (newly added) The heat sink of claim 1 wherein the plurality of adjacent fins are each 0.5 to 1.5mm thick between the interfacing side surfaces.
8. (newly added) The heat sink of claim 1 wherein the plurality of adjacent fins are each spaced a distance of 1.0 to 2.5mm to form the fluid passages between the interfacing side surfaces.
9. (newly added) The heat sink of claim 1 wherein the plurality of adjacent fins are each spaced with their interfacing side surfaces in parallel.
10. (newly added) The heat sink of claim 1 further comprising additional fins in heat conduction communication with the first thermal plate.
11. (newly added) A heat sink comprising: a first thermal plate, a second thermal plate, a plurality of fins integral with and extending between both the first thermal plate and the second thermal plate, and an outer insulative coating applied to outer surfaces of the heat sink to prevent heat from radiating outwardly from the heat sink except into passages between the fins.
12. (newly added) The heat sink of claim 11 wherein first and second thermal plates are positioned at external sides of the heat sink.
13. (newly added) The heat sink of claim 11 wherein the thermal plates are positioned at opposite ends of the heat sink with the fins extending substantially perpendicularly therebetween.

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14. (newly added) The heat sink of claim 11 further comprising a third thermal plate integral with the plurality of fins and positioned between the first thermal plate and the second thermal plate.

15. (newly added) A heat sink comprising: a first thermal plate, a second thermal plate, a plurality of fins integral with and extending between both the first thermal plate and the second thermal plate and a third thermal plate integral with the plurality of fins and positioned between the first thermal plate and the second thermal plate.

16. (newly added) The heat sink of claim 15 wherein first and second thermal plates are positioned at external sides of the heat sink.

17. (newly added) The heat sink of claim 15 wherein the thermal plates are positioned at opposite ends of the heat sink with the fins extending substantially perpendicularly therebetween.

18. (newly added) The heat sink of claim 15 further comprising an outer insulative coating applied to outer surfaces of the heat sink to prevent heat from radiating outwardly from the heat sink except into passages between the fins.